US EPA RECORDS CENTER REGION 5

Monthly Oversight Report 17 ACS NPL Site Griffith, Indiana May 4, 2002 - May 31, 2002



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Black & Veatch Special Projects Corp.

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USEPA/RAC VII American Chemical Services RAO (057-ROBF-05J7) BVSPC Project 46526 BVSPC File C.3 June 14, 2002

Mr. Kevin Adler U.S. Environmental Protection Agency 77 W. Jackson Boulevard (SR-6J) Chicago, Illinois 60604-3590

Subject:

Monthly Oversight Summary Report

No. 17 for May 2002

Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 17 for May 2002 for the American Chemical Services Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email (<u>campbelllm@bv.com</u>).

Sincerely,

BLACK & VEATCH Special Projects Corp.

Xauy M. Campbell, P.E.

Site Manager

Enclosure

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Monthly Oversight Summary Report No. 17 ACS Superfund Site WA57, 46526.238

Reporting Period: Month of May (May 4, 2002 - May 31, 2002)

BVSPC O/S Dates: May 10, 16, 23, 29, and 30, 2002

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	6	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	2	Electrical Contractor
Heritage Industrial Services	2	OFCA ISVE Yard Piping Contractor
Patrick Engineering	1	Compaction Testing Subcontractor
Ryan Construction	1	General Contractor
American Chemical Services, Inc.	1	On-site Facility
Koester Environmental Services	2	OFCA Engineered Cover Bidder
Environmental Contractors of Illinois	1	OFCA Engineered Cover Bidder
Williams Environmental	1	OFCA Engineered Cover Bidder
Midwest Environmental, Inc.	1	OFCA Engineered Cover Bidder
R.W. Collins	2	OFCA Engineered Cover Bidder
Ozinga	1	Rolloff Transport Contractor

Construction Activities

Major Activities:

- Ryan Construction replaced leaking gaskets and reassembled the thermal oxidizer.
- Montgomery Watson Harza began operating the Off-Site Containment Area in-situ soil vapor extraction system and encountered system faults.
- Austgen repaired loose wiring in the Off-Site Containment Area in-situ soil vapor extraction system programmable logic controllers and added timers to several controls.
- Montgomery Watson Harza installed a recycle pump from tank T-1 to the scrubber.

- Heritage Industrial Services recompacted the Off-Site Containment Area clay cover over the in-situ soil vapor extraction system yard piping.
- Patrick Engineering tested the moisture and compaction of the clay over the Off-Site Containment Area in-situ soil vapor extraction system yard piping.
- Austgen bent Off-Site Containment Area piezometer P110.
- Montgomery Watson Harza met with Tom Froman of American Chemical Services, Inc. to discuss the proposed On-Site Containment Area surface contours.
- Montgomery Watson Harza issued the Request for Bid Off-Site Containment Area engineered cover and held a Pre-Bid Site Walk-through meeting.
- Austgen repaired the control logic for tank T-3 to prevent overflowing.
- Montgomery Watson Harza performed maintenance on the lamella clarifier.
- Montgomery Watson Harza held weekly construction coordination meetings on May 10, 16, 23, and 30, 2002.

Activities Performed:

Ryan Construction reassembled the thermal oxidizer after replacing faulty gaskets and repairing welds. Montgomery Watson Harza (MWH) attempted to operate the Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) system, but encountered difficulties with the system controls. Austgen repaired loose wiring within the programmable logic controllers for the OFCA ISVE system, which enabled MWH to resume system operation. MWH operated the system on May 9, 2002, drawing vapors from the Group 1 wells as defined in MWH's memorandum ACS Off-Site ISVE System Test-Out Procedures, dated February 25, 2002. MWH monitored around the thermal oxidizer to confirm that the replacement gaskets were working properly. After MWH began system monitoring in accordance with the Performance Standard Verification Plan (PSVP), the OFCA ISVE system shut down. Austgen added timers to the control system that minimized the shut downs experience by the thermal oxidizer. MWH reported that by adding timers to the controls, the thermal oxidizer did not activate the shut down sequence because of "noise" in the control system. The longest timer added to the thermal oxidizer control system was 10 seconds.

On May 23, 2002, MWH installed the recycle pump that supplies the treated effluent from the groundwater treatment plant (GWTP) from tank T-1 to the scrubber system, replacing the city water previously used for blow-down of the scrubber. The recycle pump will be activated when there is sufficient water in tank T-1 to serve for blow-down. If insufficient water is available, the pump controlling the city water supply will be activated. Black & Veatch Special Projects Corp. (BVSPC) observed MWH perform a blow-down of the scrubber using the recycle pump and effluent from tank T-1.

MWH resumed operation of the OFCA ISVE system and collected a compliance sample from the thermal influent and the scrubber off-gas. MWH continued monitoring the system in accordance with the PSVP and brought Group 2 wells on-line. MWH observed on May 24, 2002, that the float switches in the condensate knockout tank located in the OFCA blower shed malfunctioned and allowed water to pass through the system. The water flooded the pressure gauge at the GWTP, which communicates with the variable frequency drive (VFD) on the thermal oxidizer. This caused the VFD to malfunction, forcing a shut down of the thermal oxidizer. MWH removed the water from the OFCA ISVE system and the pressure

gauge; however, MWH was not able to start the thermal oxidizer. MWH reported that it suspected that the water in the pressure gauge may have caused communication problems between the gauge and the VFD. Austgen began investigating the VFD component and the communication logic between the pressure gauge and the VFD.

Heritage Industrial Services (HIS) returned to the site during the week of May 20, 2002, to recompact and add moisture to the clay backfill for the OFCA ISVE yard piping. Patrick Engineering, a subcontractor to HIS, performed the compaction and moisture testing of the clay. MWH received the results of the tests and is evaluating the data.

Austgen bent OFCA piezometer P110 while rolling out tire ruts in the OFCA clay cover during the week of May 6, 2002. An MWH geologist inspected piezometer P110 to ensure that significant damage did not occur. MWH determined that the damage did not affect the functionality of the piezometer and will have the piezometer straightened and resurveyed.

MWH discussed the On-Site Containment Area (ONCA) clay cover with Tom Froman of American Chemical Services, Inc. on May 16, 2002. MWH reported some of the design contours of the interim clay cover have been revised because of the additional material excavated from the wetland for disposal in the ONCA firepond. MWH reported that these contours differ from those presented in the Final Design document and will be submitted to the Agencies for review and approval. MWH also reported that it expects to begin work on the ONCA interim cover at the end of the summer.

MWH issued the Request for Bid - Off-Site Containment Area Engineered Cover on May 20, 2002, and held the Pre-Bid Site Walk-through meeting on May 29, 2002. BVSPC attended the site meeting and discussed the details of the engineered cover construction with MWH. In addition, BVSPC observed MWH investigating the condition of the OFCA clay cover for damage from erosion. MWH reported that it would raise the elevation of extraction well EW-13 above the future elevation of the engineered cover. MWH also reported that it would install concrete rings around the piezometers and barrier wall extraction system (BWES) cleanouts. Midwest Environmental, Inc. (MEI) is scheduled to repair the damage to the clay cover caused by erosion, prior to the construction of the engineered cover.

MWH reported that it continued to operate the GWTP by pumping from all OFCA and ONCA extraction wells, the Perimeter Groundwater Containment System, and monitoring well MW56. MWH reported that the GWTP was operating between 32 and 42 gpm, the maximum rate that could be sustained by the extraction wells. MWH reported that a "bug" in the control system for the GWTP was causing tank T-3 to overflow during the backwash mode on the sand columns. MWH did not operate the GWTP from May 11, 2002 through May 13, 2002 when Austgen repaired the controls for the tank. MWH also did not operate the GWTP on May 28, 2002, in order to remove the sludge in the lamella clarifier.

Attached are BVSPC weekly reports No. 62 through 65, correspondence, log book notes, and photographs of the daily activities. BVSPC's crew conducted oversight of the major field activities on

May 10, 16, 23, 29, and 30, 2002. BVSPC's crew attended four weekly construction coordination meetings at the site on May 10, 16, 23, and 30, 2002.

Topics of Concern:

- MWH detected a hole in the seal of 8-inch-diameter OFCA ISVE vapor conveyance piping at the effluent from the blower in the OFCA blower shed.
- The residential well located at 1007 Reder Road could not be sampled because the pump was not operating. This well is part of the long term monitoring program.

Concern Resolution:

• MWH reported that it would have Ryan Construction repair the hole in the conveyance piping next week while the OFCA ISVE system is down.

Upcoming Activities:

- MWH to resume OFCA ISVE system operation in accordance with the PSVP.
- MWH to review the compaction and moisture testing results for the OFCA ISVE yard piping trench backfill.
- MEI to perform maintenance activities on the OFCA clay cover.
- MWH to complete the OFCA BWES cleanouts with manholes and extend EW-13.
- Austgen to repair damaged OFCA piezometer P110.
- Ryan Construction to repair the leak in the OFCA ISVE system vapor conveyance piping.

Signature:	Leigh Peters	Date:	June 6, 2002
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Weekly Oversight Summary Report No. 62 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of May 6, 2002 BVSPC O/S Dates: May 10, 2002 (Ms. Peters)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	4	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Ryan Construction	1	General Contractor
Austgen	1	General Contractor

Construction Activities

Major Activities:

- Ryan Construction replaced leaking gaskets and reassembled the thermal oxidizer.
- Austgen damaged piezometer P110 while rolling out the tire ruts in the Off-Site Containment Area clay cover near swale 4.
- Montgomery Watson Harza began operating the Off-Site Containment Area in-situ soil vapor extraction system and encountered system errors with the thermal oxidizer.
- Austgen repaired a loose wire on the thermal oxidizer programmable logic controller and began inspecting the program control logic.
- Montgomery Watson Harza held the weekly construction coordination meeting.

Activities Performed:

Montgomery Watson Harza (MWH) reported that Ryan Construction completed reassembling the thermal oxidizer after replacing faulty gaskets and repairing some welds. MWH reported that it was unable to start the Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) system early in the week because of system fault error messages in the thermal oxidizer and scrubber system. MWH reported that it found a loose connection in the thermal oxidizer and scrubber programmable logic controller (PLC) that was causing the system faults. Austgen repaired the wiring and MWH began operating the OFCA ISVE system on May 9, 2002.

Tom Tinics of MWH reported that shortly after he began operating the system on May 9, 2002, the thermal oxidizer registered an error message and shut down the system. MWH began operating the system again on May 10, 2002, drawing vapors from ISVE wells SVE-1, SVE-12, and SVE-14. MWH had added wells SVE-7, SVE-24, SVE-27, and SVE-31, when it observed that the chamber temperature of the

thermal oxidizer stabilized at 1575°F. MWH reduced the amount of ambient air that it was sending to the thermal oxidizer, and the chamber temperature peaked at 1730°F. The thermal oxidizer system then shut down. MWH immediately restarted the blower and continued to operate the system and measure the flow rates at the individual wells in accordance with the Performance Standard Verification Plan (PSVP). MWH performed air monitoring around the thermal oxidizer, verifying that the replacement welds and gaskets sealed off the system. Shortly after MWH began monitoring, the thermal oxidizer shut down again. MWH scheduled Austgen to inspect all of the wiring and programming in the thermal oxidizer and scrubber PLC on May 13, 2002.

MWH installed a metal plug in the OFCA ISVE header system replacing the tape covering a hole that was misdrilled during installation of the gauges.

MWH reported that Austgen was on-site to roll out the tire ruts in swale 4, located near extraction well EW-20C. While rolling the swale, Austgen bent piezometer P110. MWH reported that Autgen will return to straighten the piezometer and that MWH will inspect the piezometer to confirm that it was not damaged. MWH reported that it will investigate possibilities for protecting the OFCA piezometers during cap construction. MWH also reported that Heritage Industrial Services (HIS) has not met the requirements for the compaction and moisture for the OFCA clay cover and will return to continue compaction activities. MWH also reported that future site activities include maintenance activities to the OFCA clay cover, installing an extension to the manhole at extraction well EW-13, and completing the barrier wall extraction system (BWES) cleanouts with manholes. MWH reported that the Request for Bids for the OFCA engineered cover is expected to be issued next week and that MWH will schedule a site visit for the bidders.

Black & Veatch Special Projects Corp. (BVSPC) and MWH inspected the On-Site Containment Area firepond and PCB-impacted wetland soil stockpile. MWH reported that it kept more material in the firepond area than originally planned in the Final Remedy Design report and that it was revising the design surface contours for the firepond area.

MWH reported that the groundwater treatment plant (GWTP) was operating at 32 gpm, pumping from OFCA and ONCA extraction wells, the perimeter groundwater collection system, and MW56. MWH also reported that the biomass in the activated sludge tank has increased and that the OFCA extraction well pumps are cycling. MWH reported that it has encountered problems with the controls for the multi-media sand filters during backwash. MWH reported that tank T3 has overflowed during backwash cycles because of control problems with the pumps. MWH reported that it will have Austgen look at the control logic to resolve the problem.

MWH held the weekly construction coordination meeting on May 10, 2002.

Topics of Concern:

• The residential well located at 1007 Reder Road could not be sampled because the pump was not operating. This well is part of the long term monitoring program.

Concern Resolution:

None to report.

Upcoming Activities:

- Austgen to inspect the thermal oxidizer PLC and control logic.
- MWH to resume OFCA ISVE system operation in accordance with the PSVP.
- HIS to continue compacting OFCA clay cover in order to meet MWH requirements.
- MWH to perform maintenance activities on the OFCA clay cover.
- Austgen to repair damaged OFCA piezometer P110.
- MWH to complete the OFCA BWES cleanouts with manholes and raise EW-13.
- MWH to issue the Request for Bids for the OFCA cap.

Signature:	Leigh Peters	Date: May 14, 2002	
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Chkd. By	Description	Job No.	

5/10/02 CONSTRUCTIONS Mrs.

MUH

Leigh Peters BUSPC

MWH TOM THICS

ROB ADAMS

MWH

PETER VALT MUH (via phone)

TRAVIS KLINGBRITH MUH (via phone)

KEVIN ADLER USEPA (Na phone)

10EM (via phono) SEAN GRADY

MWH (via phase) TODO LEWIS

FAX NO.

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(312) 346-4781

630-836-8959

WEEKLY CONSTRUCTION MEETING MINUTES FOR MAY 10, 2002 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Friday, May 10, 2002

MEETING TIME: 10:00 AM

MEETING LOCATION: ACS Site – Site Trailer

ATTENDEES: Peter Vagt

Peter Vagt, MWH (via phone)

Tom Tinics, MWH Lee Orosz, MWH Chris Daly, MWH

Todd Lewis, MWH (via phone)
Travis Klingforth, MWH (via phone)

Robert Adams, MWH

Kevin Adler, USEPA (via phone) Sean Grady, IDEM (via phone)

Leigh Peters, BVSPC

The regular weekly construction meeting was held on Friday this week rather than at the usual time on Thursday.

TOPICS:

Health and Safety Summary

No health and safety incidents have occurred since the last construction meeting on April 25. MWH will be creating an Emergency Response Plan for the Site by expanding the brief emergency response plan included in the Groundwater Treatment Plant (GWTP) Operations and Maintenance (O&M) manual.

Groundwater Treatment Plant (GWTP) Status

The GWTP is operating at 32 gallons per minute (gpm) currently. MWH is bringing in water from all available extraction sources except for On-Site Area source EW-18 that has been turned off to allow MWH to focus more on dewatering the Off-Site Area. With the exception of EW-18, this is the current maximum extraction capacity of the Barrier Wall Extraction System (BWES) extraction wells.

MWH has recorded an increase in biological activity in the Activated Sludge Plant that has resulted in increased removal efficiency. Current process monitoring indicates approximately 99% removal efficiency of biological oxygen demand (BOD) in the Activated Sludge Plant. The biomass population in the Activated Sludge Plant has increased by 50% in the past few weeks.

As MWH has been expanding and upgrading the programmable logic center (PLC) for the GWTP to include the ISVE system, we have encountered various programming deficiencies or "bugs." Holding tank T-3 has overflowed during backwash mode for the sand filters ME-8 and ME-9 due to a problem in the valve control system. MWH continues to troubleshoot the upgraded PLC to resolve the programming control issues. No uncontrolled releases have occurred from these situations.

In-Situ Vapor Extraction (ISVE) System - Off-Site Area

The ISVE thermal oxidizer system was shut down on April 26 because vapor leakage was detected by MWH. Ryan Construction took the system apart, repaired the welding, and replaced the gaskets on the leakage sources detected by MWH. Ryan completed the repairs on May 6.

The thermal oxidizer system was started back up on May 7 and reached its design temperature on May 10. Augsten Electric is scheduled to begin checking the connections on all wires to the thermal oxidizer before starting the ISVE blower. Once the system is running properly again and treating vapors, the flame-ionizing detector (FID) will be used to confirm that all leaks have been repaired.

Off-Site Interim Cover Maintenance

Heritage is continuing to work with Patrick Engineering to perform compaction testing in the Off-Site Area. They are testing clay that was recompacted after the installation of the ISVE conveyance piping. To date, Heritage has not met the compaction and moisture requirements for the clay cover. During the week of May 13 Heritage is scheduled to submit their proposal for their plan to complete the work and meet MWH's performance requirements.

During the week of April 29, Augsten Electric was rolling and smoothing the grass areas in the Off-Site Area to repair ruts caused by vehicle traffic. During the process, Piezometer P-110 was bent near extraction well EW-16. MWH will assess the impact on the piezometer. MWH will also evaluate ways to protect the piezometers during future construction activities occurring on the site.

Week of	Task
May 13	 Diagnostic testing of the PLC and the ISVE system to fix "bugs" Continued ISVE system optimization after the unit is repaired. Off-Site Area Compaction and Compaction Testing Evaluation of Piezometer P-110
Month of May	 Maintenance of the Off-Site Area clay cover after winter snow and spring rain Completion of the Off-Site Area BWES cleanouts with manholes and covers Extension of the manhole cover around extraction well EW-13 to meet future final grades

Next Weekly Construction Meeting

Thursday, May 16, 2002

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Weekly Oversight Summary Report No. 63 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of May 13, 2002 **BVSPC O/S Dates:** May 16, 2002 (Ms. Peters)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	6	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
American Chemical Services, Inc.	1	On-Site Facility

Construction Activities

Major Activities:

- Montgomery Watson Harza operated the Off-Site Containment Area in-situ soil vapor extraction system for 40 hours, drawing vapors from 15 wells.
- Montgomery Watson Harza encountered problems with the thermal oxidizer activating its shut down sequence during operation of the Off-Site Containment Area in-situ soil vapor extraction system.
- Austgen inspected the wiring at the in-situ soil vapor extraction system programmable logic controllers and assisted Montgomery Watson Harza in trouble-shooting the system.
- Montgomery Watson Harza met with Tom Froman of American Chemical Services, Inc. to discuss the proposed On-Site Containment Area surface contours.
- Austgen repaired the thermal oxidizer control program and resumed operation of the system on May 18, 2002.
- Montgomery Watson Harza held the weekly construction coordination meeting.

Activities Performed:

Austgen inspected the wiring in the Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) system programmable logic controllers (PLC) and installed new control screens on the System Control and Data Acquisition system on May 13, 2002. MWH reported that it was having difficulty with the ISVE system shutting down during operation without obvious indications as to the system faults. Austgen confirmed that the wiring in the OFCA ISVE PLCs was not the source of the system faults. MWH began operating the OFCA ISVE system on May 14, 2002, and added seven additional ISVE wells. The wells added were the Group 2 wells: SVE-2; SVE-8; SVE-19; SVE-22; SVE-25; SVE-32;

and SVE-42; as described in MWH's memorandum *ACS Off-Site ISVE System Test-Out Procedures*, dated February 25, 2002. MWH reported that it also closed the ambient air valve at the OFCA blower shed so that the valve was approximately 30-40% open. Under these conditions, MWH reported that the chamber temperature in the thermal oxidizer was approximately 1750°F. MWH reported that the system operated overnight on May 14, 2002, and stopped operating at 7:00 PM on May 15, 2002.

MWH brought the thermal oxidizer back up to standby temperature on May 16, 2002, and proceeded to send vapors to the system on May 17, 2002. MWH set the thermal oxidizer in "hot-idle" mode on the evening of May 17, 2002, in order for Austgen to repair the control system. Austgen returned to the site on May 18, 2002, repaired the control system, and re-started the OFCA ISVE system.

MWH reported that Austgen repaired the controls that caused tank T-3 to overflow in the groundwater treatment plant (GWTP) on May 13, 2002. MWH did not operate the GWTP over the weekend, but resumed operation on May 13, 2002, extracting from all OFCA and On-Site Containment Area (ONCA) extraction wells, and the Perimeter Groundwater Containment System.

MWH reported that Heritage Industrial Services (HIS) is expected to submit a plan indicating the approach it will take to meet the compaction and moisture requirements for the OFCA clay cover where the ISVE yard piping was installed. MWH reported that it will review HIS's plan and will not allow HIS to perform any additional work until the plan is approved by MWH. MWH also reported that it planned to issue the Request for Bids for the OFCA engineered cover early next week. MWH scheduled the site walk-through for May 29, 2002, at 10:00 AM.

MWH discussed the ONCA clay cover with Tom Froman of American Chemical Services, Inc. on May 16, 2002. MWH reported some of the design contours of the interim clay cover have been revised because of the additional material excavated from the wetland for disposal in the ONCA firepond. MWH reported that these contours differ from those presented in the Final Design document and will be submitted to the Agencies for review and approval. MWH also reported that it expects to begin work on the ONCA interim cover at the end of the summer.

MWH held the weekly construction coordination meeting on May 16, 2002.

Topics of Concern:

• The residential well located at 1007 Reder Road could not be sampled because the pump was not operating. This well is part of the long term monitoring program.

Concern Resolution:

None to report.

Upcoming Activities:

- Austgen to work with MWH to trouble-shoot the thermal oxidizer.
- MWH to resume OFCA ISVE system operation in accordance with the PSVP.
- HIS to continue compacting OFCA clay cover in order to meet MWH requirements.

- MWH to perform maintenance activities on the OFCA clay cover.
- Austgen to repair damaged OFCA piezometer P110.
- MWH to complete the OFCA BWES cleanouts with manholes and extend EW-13.

Signature:	Leigh Peters	Date:	May 20, 2002
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WEEKLY CONSTRUCTION MEETING AGENDA FOR MAY 16, 2002 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Thursday, May 16, 2002

MEETING TIME: 10:00

MEETING LOCATION: ACS Site – Site Trailer

TOPICS:

Health and Safety Summary

GWTP Status

In-Situ Vapor Extraction (ISVE) System - Off-Site Area

- ISVE system operational for approximately 40 hours since last meeting; 15 wells active.
- Austgen Electric has set up trending screens for more effective diagnosis of system operation. Will return on Friday to modify thermox program.
- Integrity of gaskets and welds on thermal oxidizer verified with FID on 5/10.

Off-Site Temporary Cover

• Heritage will forward plan to meet compaction requirements prior to mobilizing to site again.

Looking Ahead

Week of	Task	
May 20	Off-Site Final Cover RFB issued.	
May 27	Site walk (Date TBA)	

Next Weekly Construction Meeting

• Thursday, May 23, 2002

SIGN IN SHEET WEEKLY CONSTRUCTION METING MAY 16, 2002

Name	Company	Fax Number
PETER VAGT	MWH	630/836-8959
Leigh Peters	BUSPC	312-346-4781
ROB ADAMS	MwH	第30-836 3959
CHRIS DAW	MWH	(630) 836 - 8959
TOMTINUS	MWH	219-924-4561
LEE OROSZ	- MWH	
TOAD LEWIS	mwy	630 839 8959
TRANS KLINGFORTH	must (via phove)	(630) 836 8959
KEVIN AZER	USEPA (via phone)	
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WEEKLY CONSTRUCTION MEETING MINUTES FOR MAY 16, 2002 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Thursday, May 16, 2002

MEETING TIME: 10:00 AM

MEETING LOCATION: ACS Site - Site Trailer

ATTENDEES: Peter Vagt, MWH

Tom Tinics, MWH Lee Orosz, MWH Chris Daly, MWH Todd Lewis, MWH

Travis Klingforth, MWH (via phone)

Robert Adams, MWH

Kevin Adler, USEPA (via phone)

Leigh Peters, BVSPC

TOPICS:

Health and Safety Summary

No health and safety incidents have occurred since the last construction meeting on May 10. MWH performed air monitoring with the flame ionization detector (FID) around the repaired thermal oxidizer unit, including the repaired weld and gasket locations, and no leaks were detected. MWH continues to perform regular air monitoring with the FID unit as part of process monitoring.

Groundwater Treatment Plant (GWTP) Status

The GWTP is currently operating at 35 gallons per minute (gpm). MWH is bringing in water from all available extraction sources. This is the current maximum extraction capacity of the Barrier Wall Extraction System (BWES) extraction wells.

As MWH has been expanding and upgrading the programmable logic center (PLC) for the GWTP to include the ISVE system, we have encountered various programming deficiencies or "bugs." Programming issues shut down the GWTP on May 10, but the problems were repaired on May 13. MWH continues to troubleshoot the upgraded PLC to resolve the programming control issues. No uncontrolled releases have occurred from these situations.

In-Situ Vapor Extraction (ISVE) System - Off-Site Area

The ISVE system has been repaired and was in operation for approximately 40 total hours since the last meeting on May 10. Fifteen ISVE wells are currently active. Austgen Electric set up trending screens during the week of May 13 for more effective diagnosis of

Weekly Construction Meeting Minutes

May 16, 2002 Meeting

May-21-2002 08:21am

Once the system was running continuously and treating vapors, MWH performed air monitoring on May 10 with the flame ionization detector (FID) around the repaired thermal oxidizer unit, including the repaired weld and gasket locations. No leaks were detected. MWH continues to perform regular air monitoring with the FID unit as part of process monitoring.

MWH will continue off-gas sampling of the thermal oxidizer unit once the unit has been running and treating vapors for two continuous days.

Off-Site Interim Cover Maintenance

During the week of May 20, Heritage is scheduled to submit their proposal for plans to complete the Off-Site Area ISVE System clay compaction work and meet MWH's performance requirements. They will begin site work upon approval of the plan by MWH.

Looking Ahead

Week of	Task
May 20	 Off-Site Area Final Cover Request for Bid (RFB) issued Diagnostic testing of the PLC and the ISVE system to fix "bugs" Continued ISVE system optimization after the unit is repaired. Off-Site Area Compaction and Compaction Testing Evaluation of Piezometer P-110
May 27	Site Walk for Off-Site Area Final Cover RFB (May 29 at 10 am)
Months of May/June	 Completion of the Off-Site Area BWES cleanouts with manholes and covers Extension of the manhole cover around extraction well EW-13 to meet future final grades

Next Weekly Construction Meeting

Thursday, May 23, 2002

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Weekly Oversight Summary Report No. 64 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of May 20, 2002 BVSPC O/S Dates: May 23, 2002 (Ms. Peters)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	2	General Contractor
Heritage Industrial Services	2	OFCA ISVE Yard Piping Contractor
Patrick Engineering	1	Clay Compaction Testing

Construction Activities

Major Activities:

- Montgomery Watson Harza operated the Off-Site Containment Area in-situ soil vapor extraction system.
- Montgomery Watson Harza performed system and compliance monitoring of the Off-Site Containment Area in-situ soil vapor extraction system until the system flooded with water.
- Heritage Industrial Services recompacted and added moisture to the Off-Site Containment Area clay cover.
- Patrick Engineering tested the compaction and moisture of the Off-Site Containment Area clay cover.
- Montgomery Watson Harza held the weekly construction coordination meeting.

Activities Performed:

Montgomery Watson Harza (MWH) continued to operate the Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) system. The system has operated since May 18, 2002, when Austgen modified the system controls. Austgen added timers to the control settings to reduce shut downs of the OFCA ISVE system. The longest timer added was 10 seconds. MWH reported that adding the timers to the controls eliminated the "noise" that the programmable logic control observed from the thermal oxidizer. MWH was able to operate the OFCA ISVE system without the instantaneous shut downs of the thermal oxidizer that it observed the week before.

MWH reported that operation of the OFCA ISVE system was suspended for one-half hour on May 22, 2002, in order for Austgen to install the controls for the recycle pump. The recycle pump supplies the

treated effluent from the groundwater treatment plant (GWTP) from tank T-1 to the scrubber system, replacing the city water previously used for blow-down of the scrubber. The recycle pump will be activated when there is sufficient water in tank T-1 to serve for blow-down. If insufficient water is available, the pump controlling the city water supply will be activated. Black & Veatch Special Projects Corp. (BVSPC) observed MWH perform a blow-down of the scrubber using the recycle pump and effluent from tank T-1.

MWH reported that it was pulling vapors from 12 of the 15 Group 1 and 2 wells identified in MWH's memorandum *ACS Off-Site ISVE Test-Out Procedures*, dated February 25, 2002. MWH closed the dilution air valve at the blower shed and reported that the vapors from the OFCA ISVE system maintained the thermal oxidizer chamber temperature at approximately 1700°F. MWH collected measurements of the OFCA ISVE system in accordance with the Performance Standard Verification Plan (PSVP). MWH reported that it also collected a compliance sample to determine the destruction efficiency of the thermal oxidizer. MWH reported that the compliance sampling consists of 8 weeks of sampling, contrary to what is written in the PSVP. MWH reported that it had researched the federal and state requirements for compliance monitoring of similar equipment. The most restrictive of air monitoring regulations require that 8 weeks of compliance sampling be performed, which MWH elected to follow.

BVSPC observed Tom Tinics of MWH perform the OFCA ISVE system monitoring. BVSPC observed that liquid was entrained in the OFCA ISVE wells SVE-7 and SVE-32. MWH reported that the liquid entrained in SVE-7 is not likely related to the saddle at the well that was repaired last month by Heritage Industrial Services (HIS). Rather, MWH reported that the groundwater level in SVE-7 was high and the water is from the well itself. MWH speculated that the same was true at SVE-32: the water originated from the well itself, not the connection with the yard piping. MWH reported that the water in the ISVE piping would be removed in the knockout tank.

MWH also reported that it found a small hole, approximately 0.5-inch in length in the seal at the effluent of the blower to the 8-inch-diameter vapor conveyance piping to the GTWP. Tom Tinics of MWH reported that he monitors around the hole with the FID and that he observed elevated readings at the hole, but not around it. He also reported that MWH is operating the ventilation fan constantly to ensure that the blower shed is properly ventilated. MWH reported that it will shut the OFCA ISVE system down in order for Ryan Construction to repair the leak within the next few weeks.

MWH reported that the thermal oxidizer shut down on Friday, May 24, 2002. MWH found that the float switches in the condensate knockout tank failed and allowed water to pass through the system to the gauges in the GWTP. The water caused a failure of the pressure gauge and forced the thermal oxidizer to shut down.

Heritage Industrial Services (HIS) was on-site to recompact and add moisture to the OFCA clay cover. HIS brought a larger vibratory roller and water tank to the site to recompact the clay placed over the OFCA ISVE yard piping. Patrick Engineering, subcontractor to HIS, tested the compaction and moisture of the OFCA clay cover. MWH reported that it would begin reviewing the results of the testing early next week; however, MWH reported that preliminary results indicate that HIS is not meeting the compaction

and moisture requirements. MWH reported that it inspected piezometer P110 which was bent by Austgen two weeks ago. MWH reported that the damage did not affect the functionality of the piezometer and that the piezometer will require straightening and resurveying.

MWH reported that it distributed the Request for Bid (RFB) for the OFCA engineered cover on May 20, 2002. MWH scheduled the site walk-through meeting at 10:00 AM on May 29, 2002. MWH reported that it expects cap construction to begin on July 1, 2002, with completion by September 31, 2002. MWH also reported that it expects to have Midwest Environmental, Inc. (MEI) perform the maintenance activities on the OFCA clay cover. MWH also reported that it will complete the OFCA barrier wall extraction system (BWES) cleanouts with manholes and extend the manhole at extraction well EW-13.

MWH reported that the GWTP was operating at 42 gpm, pumping water from the OFCA and On-Site Containment Area extraction wells, the Perimeter Groundwater Containment System, and monitoring well MW56. MWH also reported that it replaced the pump in extraction well EW-15. MWH reported that it will be performing maintenance on the lamella clarifier next week.

MWH held the weekly construction coordination meeting on May 23, 2002.

Topics of Concern:

- MWH detected a hole in the seal of 8-inch-diameter OFCA ISVE vapor conveyance piping at the effluent from the blower in the OFCA blower shed.
- The residential well located at 1007 Reder Road could not be sampled because the pump was not operating. This well is part of the long term monitoring program.

Concern Resolution:

• MWH reported that it would shut the OFCA ISVE system down in the upcoming weeks in order for Ryan Construction to repair the hole in the conveyance piping.

Upcoming Activities:

- MWH to repair the thermal oxidizer, pressure gauge, and resume operating the OFCA ISVE system.
- Ryan Construction to repair the hole in the OFCA ISVE conveyance piping.
- HIS to compact OFCA clay cover in order to meet MWH requirements.
- MEI to perform maintenance activities on the OFCA clay cover.
- MWH to complete the OFCA barrier wall extraction system cleanouts with manholes and extend EW-13.
- Austgen to repair damaged OFCA piezometer P110.
- MWH to hold the site walk-through for the OFCA cap RFB.
- MWH to perform maintenance on the lamella clarifier.

Signature:	Leigh Peters	Date:	May 28, 2002
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WEEKLY CONSTRUCTION MEETING AGENDA FOR MAY 23, 2002 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Thursday, May 23, 2002

MEETING TIME: 10:00

MEETING LOCATION: ACS Site – Site Trailer

TOPICS:

Health and Safety Summary

GWTP Status

In-Situ Vapor Extraction (ISVE) System - Off-Site Area

•

Off-Site Temporary Cover

•

Looking Ahead

Week of	Task	
May 20	•	
May 27	•	

Next Weekly Construction Meeting

• Thursday, May 30, 2002

SIGN IN SHEET WEEKLY CONSTRUCTION METING MAY 23, 2002

Name	Company	Fax Number
ROBERT ADAMS	MWH	630-236-8959
CHES DAVY		
Ligh Peters	BUSPC	312 346 4787
•	MWH	
	Aus Klinkforth	
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ks	VIN Adler.	
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WEEKLY CONSTRUCTION MEETING MINUTES FOR MAY 23, 2002 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Thursday, May 23, 2002

MEETING TIME: 10:00 AM

MEETING LOCATION: ACS Site - Site Trailer

ATTENDEES:

Peter Vagt, MWH (via phone)

Tom Tinics, MWH Chris Daly, MWH

Travis Klingforth, MWH (via phone)

Robert Adams, MWH

Kevin Adler, USEPA (via phone) Sean Grady, IDEM (via phone)

Leigh Peters, BVSPC

TOPICS:

Health and Safety Summary

No health and safety incidents have occurred since the last construction meeting on May 16. MWH has completed updating site health and safety files with current medical and HAZWOPER 8-hour refresher course paperwork for individuals who regularly visit the Site.

Groundwater Treatment Plant (GWTP) Status

The GWTP is currently operating at 42 gallons per minute (gpm). MWH is bringing in water from all available extraction sources. This is the current maximum extraction capacity of the Barrier Wall Extraction System (BWES) extraction wells.

A new pump, Pump P-112, has been added to the GWTP. This new pump will pump treated effluent water to the thermal oxidizer unit for use in the blowdown and cooling of the unit. Prior to the installation of P-112, MWH had been using piped water from the town of Griffith.

MWH has fixed several programming deficiencies or "bugs" encountered during the expansion and upgrade of the GWTP programmable logic center (PLC) for the ISVE system.

The Lamella Clarifier will be drained, cleaned, and inspected during the week of May 27 as part of regular maintenance of the GWTP. The unit is expected to be out of operation one day as MWH removes the sludge buildup in the unit in order to increase ease of operation.

In-Situ Vapor Extraction (ISVE) System - Off-Site Area

The ISVE system has been in continuous operation for the last six days since May 18. Twelve ISVE wells are currently active. Austgen Electric installed timing devices in the PLC during the week of May 20 to minimize the impact of internal control panel interference signals which had been causing the ISVE to shut down.

MWH continues daily monitoring of the ISVE system in accordance with the Performance Standard Verification Plan (PSVP). MWH will evaluate the system during the first six months of operation to determine what upgrades may be needed. Off-gas samples were collected from the thermal oxidizer and catalytic oxidizer units on May 22 and were sent to Air Toxics Laboratory for analysis. These samples are used to determine the destruction efficiency of the units.

Off-Site Area Final Cover

MWH issued the Request for Bid (RFB) for the installation of the final cover in the Off-Site Area. The final cover will include a flexible membrane liner (FML). A site walk is scheduled for all bidders on May 29 at 10 am.

MWH has identified tasks that need to be completed prior to installing the final cover:

- The surface elevation of extraction well EW-13 will be raised to meet the proposed grade for the final cover.
- The clay surface will be prepared and the erosion matting repaired for the installation of the FML cover.

An MWH geologist examined piezometer P-110 on May 15, which was bent slightly after being hit by equipment earlier in May. He determined that there is no significant damage to the piezometer. The piezometer will be straightened and will continue to be used. The reference elevation will be re-surveyed the next time a surveyor is on site to survey monitoring wells and piezometers.

Off-Site Interim Cover Maintenance

Hentage Industrial continued the Off-Site Area ISVE System clay compaction work on May 22. Patrick Engineering performed compaction testing on May 22 and May 23 and will be submitting final compaction results to MWH during the week of May 27. If the compaction and moisture requirements are not met, methods for future actions will need to be evaluated.

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Looking Ahead

Week of	Task
May 27	Site Walk for Off-Site Area Final Cover RFB (May 29 at 10 am)
Months of May/June	 Completion of the Off-Site Area BWES cleanouts with manholes and covers Extension of the manhole cover around extraction well EW-13 to meet future final grades

Next Weekly Construction Meeting Thursday, May 30, 2002

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Weekly Oversight Summary Report No. 65 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of May 27, 2002

BVSPC O/S Dates: May 29 and 30, 2002 (Ms. Peters)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	5	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	2	General Contractor
Ozinga	1	Rolloff Transport Contractor
Koester Environmental Services	2	OFCA Engineered Cover Bidder
Heritage Industrial Services	1	OFCA Engineered Cover Bidder
Environmental Contractors of Illinois	1	OFCA Engineered Cover Bidder
Williams Environmental	1	OFCA Engineered Cover Bidder
Midwest Environmental, Inc.	1	OFCA Engineered Cover Bidder
R.W. Collins	2	OFCA Engineered Cover Bidder

Construction Activities

Major Activities:

- Montgomery Watson Harza continued to repair the thermal oxidizer and investigate the variable frequency drive.
- Montgomery Watson Harza held the Pre-Bid Site Walk-through meeting for the Off-Site Containment Area engineered cover.
- Montgomery Watson Harza inspected the Off-Site Containment Area cover for erosional damage.
- Montgomery Watson Harza performed maintenance on the lamella clarifier.
- Montgomery Watson Harza held the weekly construction coordination meeting.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it removed the water from the pressure gauge that was flooded last week. However, MWH reported that the variable frequency drive (VFD) at the thermal

oxidizer was not communicating properly with the pressure gauge, thereby causing system failures. Austgen began investigating the control programming for the VFD and thermal oxidizer to determine whether the faults were generated in the control logic or if there is a component problem with the VFD.

MWH is working with Fliteway, the manufacturer of the blower shed, to reconfigure the float switch locations in the condensate knockout tank to prevent future damage to the ISVE system. MWH anticipated resuming system operation during the week of June 3, 2002. MWH reported that it would arrange for Ryan Construction to repair the leak in the OFCA ISVE vapor conveyance piping in the blower shed next week while the system is not operating. MWH anticipated testing the Group 3 wells when the system is back on-line.

Black & Veatch Special Projects Corp. (BVSPC) attended the Pre-Bid Site Walk-through meeting held by MWH for the OFCA engineered cover on May 29, 2002. MWH discussed the contents of the Request for Bid (RFB) and conducted a site walk-through for the six potential bidders. Bids are due June 6, 2002, to MWH, with work scheduled to begin on August 1, 2002. MWH addressed questions and comments raised by the bidders and reported that it will send out meeting minutes on June 3, 2002.

BVSPC observed MWH walk the OFCA interim cover to identify areas of significant erosion that will require repair prior to the installation of the engineered cover. MWH reported that it would raise the elevation of extraction well EW-13 above the future elevation of the OFCA engineered cover. MWH also reported that it would install concrete rings around the piezometers and barrier wall extraction system (BWES) clean outs prior to construction of the engineered cover. MWH stated that it will address the ponding water located between extraction wells EW-20B and EW-20C by rolling out the area.

MWH reported that it received the compaction and moisture testing results from Patrick Engineering for the backfill for the ISVE yard piping trenches. MWH reported that it will continue to review these results to determine whether Heritage Industrial Services has met the compaction and moisture requirements.

MWH temporarily stopped operating the groundwater treatment plant (GWTP) on Tuesday, May 28, 2002, in order to clean the sludge from the lamella clarifier. MWH resumed operation of the GWTP on May 29, 2002, pumping from all available On-Site Containment Area and OFCA extraction wells, the Perimeter Groundwater Containment System, and monitoring well MW56. MWH reported that the GWTP was operating at 42 gpm, the current maximum extraction capacity of the BWES.

MWH held the weekly construction coordination meeting on May 30, 2002.

Topics of Concern:

- MWH detected a hole in the seal of 8-inch-diameter OFCA ISVE vapor conveyance piping at the effluent from the blower in the OFCA blower shed.
- The residential well located at 1007 Reder Road could not be sampled because the pump was not operating. This well is part of the long term monitoring program.

Concern Resolution:

• MWH reported that it would have Ryan Construction repair the hole in the conveyance piping next week while the OFCA ISVE system is down.

Upcoming Activities:

- MWH to complete repairs to the OFCA ISVE system and resume system operation in accordance with the PSVP.
- MWH to review the compaction and moisture testing results for the OFCA ISVE yard piping trench backfill.
- MEI to perform maintenance activities on the OFCA clay cover.
- MWH to complete the OFCA barrier wall extraction system cleanouts with manholes and extend EW-13.
- Austgen to repair damaged OFCA piezometer P110.
- Ryan Construction to repair the leak in the OFCA ISVE system vapor conveyance piping.

Signature:	Leigh Peters	Date:June 5, 2002	
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SIGN IN SHEET WEEKLY CONSTRUCTION METING MAY 30, 2002

Name	Company	Fax Number
Lough PLACUS	BUSPC	312-346-4781
	MWH	630 -836- 8959
Tom TIMICS	MW4	
LEE OROSZ	MWH	
ROB ADAMS	NWH (NO phone)	
PETER VALT	may (na phace)	
KEVIN ADIER	10EPA (vayhow)	
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WEEKLY CONSTRUCTION MEETING MINUTES FOR MAY 30, 2002 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Thursday, May 30, 2002

MEETING TIME: 10:00 AM

MEETING LOCATION: ACS Site – Site Trailer

ATTENDEES:

Peter Vagt, MWH (via phone)

Tom Tinics, MWH Chris Daly, MWH Lee Orosz, MWH

Travis Klingforth, MWH (via phone) Robert Adams, MWH (via phone) Kevin Adler, USEPA (via phone)

Leigh Peters, BVSPC

TOPICS:

Health and Safety Summary

No health and safety incidents have occurred since the last construction meeting on May 16. The only major activity which has occurred on the site since the last meeting was the pre-bid site walk for the installation of the Off-Site Area Final Cover.

Groundwater Treatment Plant (GWTP) Status

The GWTP is currently operating at 42 gallons per minute (gpm). MWH is bringing in water from all available extraction sources. This is the current maximum extraction capacity of the Barrier Wall Extraction System (BWES) extraction wells.

The Lamella Clarifier was drained, cleaned, and inspected on May 28 as part of regular maintenance of the GWTP. The GWTP was out of operation one day as MWH removed the sludge buildup in the unit in order to increase ease of operation.

The Activated Sludge Plant has continued to remove contaminants with increased efficiency during the past few months due to continued biomass growth.

In-Situ Vapor Extraction (ISVE) System - Off-Site Area

The ISVE system has been out of operation since May 23. The float switches in the Blower Shed knockout tank failed and allowed water to accumulate in the pressure gauge at the GWTP. The pressure gauge communicates with the variable frequency drive (VFD) motor that controls the speed of the thermal oxidizer's process blower. As a result of faulty pressure readings, the blower system's safety devices shut down the unit. MWH is still determining if the pressure gauge and/or VFD motor need to be replaced. MWH has

Weekly Construction Meeting Minutes

May 30, 2002 Meeting

replaced and reconfigured the float switches to avoid this problem in the future. Projected startup of the system is during end of the week of May 27 or the beginning of the week of June 3.

Off-Site Area Final Cover

MWH hosted a site walk for the installation of the Off-Site Area Final Cover for all bidders on May 29 at 10 am. Bids are due June 6 and work is scheduled to begin on August 1.

MWH has identified tasks that need to be completed prior to installing the final cover:

- The surface elevation of extraction well EW-13 will be raised to meet the proposed grade for the final cover.
- The clay surface will be prepared and the erosion matting repaired for the installation of the FML cover.

In addition, MWH will repair the ruts around extraction well EW-20C that collect standing water after rain events. The repairs may occur before the completion of the Final Cover or they may be postponed until after the Final Cover is completed.

Off-Site Interim Cover Maintenance

Patrick Engineering, on behalf of Heritage Industrial, has submitted final compaction results to MWH. MWH is reviewing them and will work with Heritage Industrial to determine the next step.

Looking Ahead

Week of	Task
Month of June	Completion of the Off-Site Area BWES cleanouts with manholes and covers
\$. \$	 Extension of the manhole cover around extraction well EW-13 to meet future final grades

Next Weekly Construction Meeting

• Thursday, June 6, 2002

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5/3/62 Jef 5 PMS P. Vingt MWH (Marphone) T. Kling forth purp (via phone) 4+5 12 H+5 issues or concerns. GWTP: EN 15 pump replaced Pulling from ail wells - PGCS + MWSB next weeks - MWH to perform maintenance on lamella claritier 15VE: Operating continuously since Sat Austgen added times Group 1 x 11 wills on-line, andiend air value closed thermox chamber knop at 1730 F. vapous able to sustain bum temp MWH to perform weekly in anitoring of thorner. OFCA COVER HIS still trying to get impactor. and moisture. RFB but Monday for OF CA cong Walk Morgin 5/29/02 @ 10:00 Look Alread: ANTI to perform maintenance to OFIA 1830 ptg concluded, next meeting 5/30/02 @ 10 mm Went to OFEA to observe T. TIMES MODITY 15VE SUSTAM. Wells on-line ave: 1,2,7,19, 14, 24, 25, 27, 37, 32, Observed liquid contrained in SVE 32 1110 Roll 22 Photo 7 Eaging north east of logued In SVE 32 T. Times reported mot water fored in SVE7 is high significant butter in pring Bom SUET By Estan

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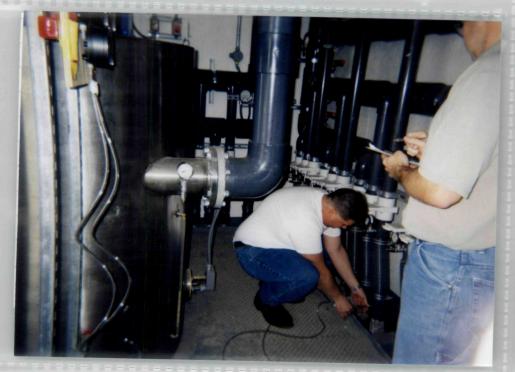
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(82) She Enter 5/29/02 MINH conducted tow of DFIA Cap as part of RFB mechan Re1122 Photo 9 facing south of stainless electrical cable installed by Misigen Wist WINKER Roll 32 Photo 10 thying south lovering it ground 1045 enched from exertical condit. Roll 22 Photo 11 tring north of exposed ISVE yardiping to ISVEWCY SVE B 1053 Poll 32 Photo 12 Paing South showing Mist discussing plans for sware 5 with contractors the OFFIA Cap Fre-bid Medry 1140 RFB Me but meeting concluded. Left Site for cky

The State 5/30/02 Spoke of the C. D. C. and R. Frons Theimex. R. Flores need: 6 ed "de ty west of sit weekery construction of source minst live this Attendes * on previous 1/5+ p14: Kevin Acaler USEPH (Via phone Rob Adams MMH Kunghond retor Vait Must Craphy Kingforthe Man of Over pron Agr & Rita

Toff & Peters 5/30/02 HIS: No incidents only own horacross misite. ventor pre-bid muting BWIP: plant down from & An Tresday to 830 Am Nidnesday for clambing shulge from lamelladjuities purping from ENS 10,11, 12,15 16, 17, 18, 19A, 20, 201, 20B PGLS and MWSO 15 VE: System down since last triday. failure of Hoat switches in condensate knock out tanks allowed witer through system and Morded magnitudic and present garges at 6 WiP. MW it tulking to Flitzway regarding instruior delocars on knock out tank. Thermox in hot idle, VFD not operating property, Mult naving ansigen looking at controls and determining it component problem. Mut to test out group 3 wills next DECACOVEY: 5-6 bloders for the probed meeting yesterday Plan to have MEI report major areas of erosion. Buspe identified serveral orses observed yesterday with evesim MWH reported WEI to repair + to evaluate volling lover after cap construction for the punding wester. Must received test results from HIS and under versew. look Ahead . the mox to be back on - line, MUH Tobe in contact with HIS OF UM bids Dypo & Juto

Tople EPeter 5/36/02 world to orga with to Dally of the triviles





Proj. #: 46526

Roll: 22 Photo #1 Date: 05-10-02 Time: 09:35

Photographer: Leigh Peters

Description: Photo facing west showing MWH

measuring the flow rate of SVE-27 in the

blower shed in accordance with the

PSVP.

Site: American Chemical Services, Inc.

Proj.#: 46526

Roll: 22 Photo #2 Date: 05-10-02 Time: 09:45

Photographer: Leigh Peters

Description: Photo facing north showing the metal plug

inserted in the OFCA ISVE header in the

blower shed.





Proj. #: 46526

Roll: 22 Photo #3 Date: 05-10-02 Time: 11:00

Photographer: Leigh Peters

Description: Photo facing south showing the water in

ONCA firepond area and extraction

pump.

Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 22 Photo #4
Date: 05-10-02 Time: 11:00

Photographer: Leigh Peters

Description: Photo facing southeast showing the

stockpile of PCB-contaminated soils

from the wetland area.





Proj. #: 46526

Roll: 22 Photo #5 Date: 05-16-02 Time: 08:40

Photographer: Leigh Peters

Description: Photo facing northeast showing the

damage to OFCA piezometer P110.

American Chemical Services, Inc. Site:

Proj. #: 46526

Photo #6 Roll: 22 Time: 08:40 Date: 05-15-02

Photographer: Leigh Peters

Description: Photo facing northeast at the ground

showing the damaged piezometer P110.





Proj. #: 46526

Roll: 22 Photo #7 Date: 05-23-02 Time: 11:10

Photographer: Leigh Peters

Description: Photo facing north showing the liquid

entrained in OFCA ISVE well SVE-32.

Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 22 Photo #8
Date: 05-23-02 Time: 11:15

Photographer: Leigh Peters

Description: Photo facing west showing the water entrained in OFCA ISVE well SVE-7.





Proj. #: 46526

Roll: 22 Photo #9 Date: 05-29-02 Time: 10:40

Photographer: Leigh Peters

Description: Photo facing south showing the erosion in

the OFCA clay cover where the stainless steel conduit was installed by Austgen.

Site: American Chemical Services, Inc.

Proj. #: 46526

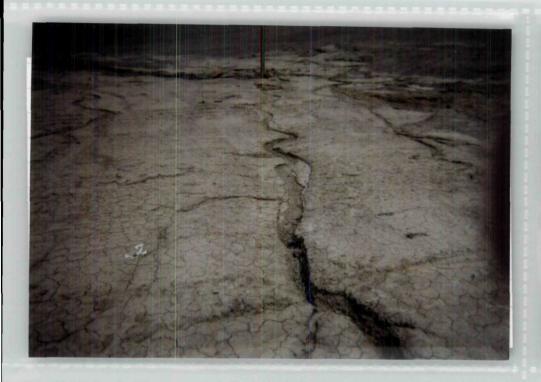
Roll: 22 Photo #10 Date: 05-29-02 Time: 10:45

Photographer: Leigh Peters

Description: Photo facing south looking at the ground

where the OFCA clay cover has eroded from the trench where stainless steel

conduit was installed.





Proj. #: 46526

Roll: 22 Photo #11 Date: 05-29-02 Time: 10:55

Photographer: Leigh Peters

Description: Photo facing north showing the exposed

HDPE yard piping to OFCA ISVE well

SVE-28.

Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 22 Photo #12 Date: 05-29-02 Time: 11:10

Photographer: Leigh Peters

Description: Photo facing south showing MWH

discussing plans for swale 5 with the OFCA engineered cover bidders.





Proj. #: 46526

Roll: 22 Photo #13 Date: 05-30-02 Time: 11:10

Photographer: Leigh Peters

Description: Photo facing east showing the filled

culvert piping at the permanent power

supply to the OFCA blower shed.

Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 22 Photo #14 Date: 05-30-02 Time: 11:15

Photographer: Leigh Peters

Description: Photo facing east showing the root-zone

material that flowed over the silt fencing

into swale 3.



Proj. #: 46526

Roll: 22 Photo #15 Date: 05-30-02 Time: 11:20

Photographer: Leigh Peters

Description: Photo facing northwest showing the

ponding water located on the OFCA

non-engineered cover between extraction

wells EW-20B and EW-20C.